# **SUBBASE**

## Subbase

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#### Archeological/Historic Preservation

If a batch plant is to be located on INDOT right-of-way within the limits of the project, then the right-of-way has already had archaeological clearance during the preliminary engineering phase of the project. If the plant is to be located on INDOT right-of-way beyond the project limits, check with the Division of Operations Support to determine whether the site will require an archaeological reconnaissance. When a batch plant is located on private property, and the contractor is being paid with federal funds for the project work, the National Historic Preservation Act extends the protection of the site to the contractor. It will be the responsibility of the contractor to have the site cleared by an archaeologist prior to its use. It is generally not feasible for INDOT personnel to be responsible for verifying that the contractor is complying with all appropriate laws when the contractor has been delegated the responsibility of complying with all appropriate Laws and Regulations Section by contract. However, if INDOT is aware of or has reason to believe that the contractor is violating the law, INDOT does have the obligation to prevent the violation and/or ensure that the contractor takes action to comply with federal law relating to historic preservation. If any artifacts or relics are discovered, relevant state and federal law will apply.

See Archeological and Historic Section in the Laws and Regulations Section for further information

#### Concrete/Asphalt Batch Plants

#### Air Permitting

Indiana's air rules require any source or facility that emits more than a certain amount of pollutants into the atmosphere to obtain an air permit from the Indiana Department of Environmental Management (IDEM). Bituminous asphalt batch plants release volatile organic compounds (VOCs), nitrous oxides (NO<sub>x</sub>), and sulfur dioxide (SO<sub>2</sub>) into the atmosphere. In addition, both asphalt and concrete batch plants release particulate matter (PM-10). These laws apply to portable sources or facilities. To acquire a permit for either an asphalt or a concrete batch plant, the contractor must submit completed forms to IDEM (forms supplied by IDEM's Office of Air Management). After the contractor acquires the portable plant operating permit, he may move the operation to another location by providing IDEM thirty days notice of the proposed location. For these portable batch plants IDEM will issue a site approval letter for the proposed site. Project Engineer/Supervisor and Inspectors should ask contractors to produce this site approval letter. If contractors do not have a valid air permit and site approval letter, IDEM will issue a violation to the contractor. Fines could be up to \$25,000/day/violation. If INDOT permits the contractor to use INDOT right-of-way for the construction and operation of a portable plant and the contractor does not obtain a valid air permit and site approval letter,

INDOT may be considered a responsible party as the owner of the property where the unauthorized activity is taking place. The contractor, as the operator of the unauthorized activity, will also be considered a responsible party. Initial notices of a violation for failure to obtain the air permit would be sent to the contractor as the operator of the unauthorized activity and INDOT as owner of the right-of-way. If INDOT could produce evidence such as a written contract showing that the contractor was responsible for obtaining the necessary permits, IDEM would consider the contractor responsible for the violation and pursue action and assess penalties against the contractor. INDOT will not be responsible for the failure of the contractor to obtain an air permit if the contractor negotiates for the placement of the plant on private property that is not owned by INDOT.

The state regulations maintain that for transfer of permits for state construction and operating permits the following applies:

- (a) A portable source, operation, process, or emissions unit that has been issued a valid operating permit under this article may be issued a site approval letter for a new site that authorizes operation of the source, operation, process, or emissions unit as follows:
  - (1) The source submits a notification at least thirty (30) days prior to relocation.
  - (2) The commissioner shall approve or deny the relocation within thirty (30) days of receipt of the notification of the proposed relocation.
  - (3) The application submitted for a permit revision in accordance with 326 IAC 2-6.1-6, 326 IAC 2-7-12, or 326 IAC 2-8-11.1 shall satisfy the notification requirements of this section.
- (b) The commissioner shall not approve a relocation of a portable source, operation, process, or emissions unit, if the following applies:
  - (1) The relocation would allow a violation of the national ambient air quality standards (NAAQS).
  - (2) The relocation would allow a violation of a prevention of significant deterioration (PSD) maximum allowable increase.
  - (3) The source is not in compliance with all applicable air pollution control rules.
  - (4) The relocation would adversely affect the public health.

#### Water Permitting

The Indiana Department of Natural Resources (IDNR) requires contractors to comply with IC 14-25-7, section 15. This statute requires temporary concrete plants to register with IDNR as a significant water withdrawal facility.

#### IC 14-25-7-15

- (b) Every person who has a significant water withdrawal facility shall register the facility with the commission on forms provided by the commission that contain the following:
  - (1) The name and legal address of the registrant.
  - (2) The source of water supply.
  - (3) The total capability of the water withdrawal facility.
  - (4) The total withdrawal capability per day and the amount from each source.

- (5) The use to be made of the water, the place of use, and the place of discharge.
- (6) The geographic location of the supply source.
- (7) The date of registration.
- (8) Other information specified by rule.
- (c) A significant water withdrawal facility must be registered within three (3) months after the facility is completed.
- (d) The owner of a registered significant water withdrawal facility shall, within three (3) months after the end of each year, make a verified report to the commission on forms to be provided by the commission of the amounts of water withdrawn during the year.
- (e) Under rules adopted by the department, the department may waive the requirement of the information set forth in subsections (b) and (d) with respect to a temporary significant water withdrawal facility.

See Concrete/Asphalt Batch Plants Section in the Laws and Regulations Section for further information

#### <u>Karst</u>

When a project is located in a karst area, care must be taken as to where the drainage from the batch plant goes. If the batch plant is located near a sinkhole or other karst feature, the regulatory agencies will require control of the drainage such that the acute and chronic criteria for surface water quality criteria are not exceeded.

See Karst Section in the Laws and Regulations Section for further information.

#### Special Materials - Slag, Foundry Sand

Slag is a by-product of steel manufacturing. Depending on the process in which the slag was used, it may be considered hazardous. Non-hazardous slag from the manufacture of iron and steel is not subject to the solid waste disposal provision if used as a base for road building (but not land reclamation). If foundry sand is to be used as a subbase material, not only must it be capable of bearing the load of the roadway, but also it must also not contain hazardous contaminants in amounts sufficient to render it hazardous. IDEM has limitations for the use of type III ferrous green sand as highway embankments or structural fills. The primary environmental concern about the use and disposal of waste foundry sand is the potential for certain constituents to leach into the soil and groundwater at concentrations determined to be potentially hazardous to human health and the environment. IDEM classifies foundry waste on the basis of toxicity testing. Testing results must show that the foundry sand is well below limits and are non-hazardous. IDEM allows the use of waste type III foundry sand as a base for road buildings, but not for use in land reclamation.

Before using these products, consult with the Division of Operations Support for guidance.

See Special Materials - Slag, Foundry Sand Section in the Laws and Regulations Section, for further information.

#### Spill Response

Hazardous material releases, oil spills, fish/animal kills and radiological incidents must be reported to Office of Emergency Response, IDEM (888) 233-7745. This should occur as soon as action has been taken to either contain/control the extent of the release, or protect persons, animals or fish from harm or further harm. Appropriate response actions for spills occurring on project sites, in order:

- 1. Identify the spilled material from a safe distance,
- 2. Contain the spilled material or block/restrict its flow using absorbent booms/pillows, dirt, sand or by other available means,
- 3. Cordon off the area of the spill,
- 4. Deny entry to the cordoned off area to all but response personnel, and
- 5. Contact OER/IDEM then Operations Support.

See Spill Response in the Laws and Regulations Section for further information.